

SHEET 1 OF 9

| <b>INFORMATION DISCLOSURE<br/>CITATION</b><br><br><b>PTO-1449</b>             | ATTY. DOCKET NO.  | SERIAL NO. |                |           |           |  |
|---|---|------------|----------------|-----------|-----------|--|
|   | 14912.786   | 10/053,138 |                |           |           |  |
|   | APPLICANT Stephen E. Savas  |            |                |           |           |  |
|   | FILING DATE 01/18/2002  | GROUP 1763 |                |           |           |  |
| <b>U.S. PATENT DOCUMENTS</b>  |   |            |                |           |           |  |
| EXAMINER'S INITIALS   | PATENT NO.  | DATE       | NAME           | CLASS     | SUBCLASS  | FILING DATE  |
| PL  | 5,571,366   | 11/1996    | Ishii et al.   | 156       | 345       |  |
| PL  | 5,647,913   | 07/1992    | Blalock        | 118       | 723I      |  |
| PL  | 5,558,722   | 09/1996    | Okumura et al. | 118       | 723I      |  |
| PL  | 5,556,521   | 09/1996    | Ghanbari       | 204       | 192.37    |  |
| PL  | 5,449,432   | 09/1995    | Hanaw          | 156       | 643.1     |  |
| PL  | 5,696,428   | 12/1997    | Pasch          | 315       | 111.21    |  |
| PL  | 5,690,781   | 11/1997    | Yoshida et al. | 156       | 345       |  |
| PL  | 5,401,350   | 03/1995    | Patrick et al. | 156       | 345       |  |
| PL  | 6,068,784   | 05/2000    | Collins et al. | 118       | 723I      |  |
| <b>FOREIGN PATENT DOCUMENTS</b>   |   |            |                |           |           |  |
| EXAMINER'S INITIALS   | PATENT NO.  | DATE       | COUNTRY        | CLASS     | SUBCLASS  | TRANSLATION  |
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| PL  | 2 105 729 A   | 30.03.83   | Great Britain  | C08 J7/00 | C08F 2/52 | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| PL  | 408288272   | 11/1996    | Japan          | C23C      | 16/50     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| PL  | 0154482A2   | 11/1985    | Europe         | C23C      | 16/00     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
| PL  | 2240114A  | 07/1991    | Great Britain  | C23C      | 16/26     | <input type="checkbox"/> <input checked="" type="checkbox"/> |
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| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b> |   |            |                |           |           |  |
| PL  | R. W. Boswell et al., "Pulsed high rate plasma etching with variable Si/SiO <sub>2</sub> selectivity and variable Si etch profiles," Appl. Phys. Lett. 47 (10), 15 Nov. 1985, pp. 1095-1097 |            |                |           |           |  |
| PL  | J. Pope et al., "A Highly Selective Nitride to Oxide Etch to Reduce Single Bit Failures on Memory Products," Electrochemical Society Proceedings, Vol. 93-21, 1993, pp. 168-234             |            |                |           |           |  |
| PL  | PCT International Search Report dated 07 MAR 1997 of corresponding PCT Application No. PCT/US96/16138, references cited above.  |            |                |           |           |  |
| EXAMINER <i>P. Hassanzad-d</i>  | DATE CONSIDERED 5-25-03   |            |                |           |           |  |

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| FILING DATE 01/18/2002                             | GROUP 1763                 |            |

## U.S. PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT NO. | DATE       | NAME            | CLASS | SUBCLASS | FILING DATE |
|---------------------|------------|------------|-----------------|-------|----------|-------------|
| PL                  | 5,811,022  | 09/22/1998 | Savas et al.    | 216   | 68       | 11/15/1994  |
| PL                  | 5,534,231  | 07/09/1996 | Savas           | 216   | 67       | 01/17/1995  |
| PL                  | 5,419,805  | 05/30/1995 | Jolly           | 156   | 643.1    | 02/18/1994  |
| PL                  | 5,399,237  | 03/21/1995 | Keswick et al.  | 156   | 643      | 01/27/1994  |
| PL                  | 5,362,358  | 11/08/1994 | Yamagata et al. | 156   | 643      | 05/14/1993  |
| PL                  | 5,354,417  | 10/11/1994 | Cheung et al.   | 156   | 643      | 10/13/1993  |
| PL                  | 5,354,381  | 10/11/1994 | Sheng           | 118   | 723      | 05/07/1993  |
| PL                  | 5,344,792  | 09/06/1994 | Sandhu et al.   | 437   | 200      | 03/04/1993  |
| PL                  | 5,332,441  | 07/26/1994 | Barnes et al.   | 118   | 723      | 10/31/1991  |

## FOREIGN PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION              |                          |
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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |  |
|----|--|
| PL | T.H. Ahn et al., "Negative ion measurements and etching in a pulsed-power inductively coupled plasma in chlorine," <i>Plasma Sources Sci. Technol.</i> 5, p. 139 (1996). |
|    | C. Charles et al., "Breakdown, steady-state, and decay regimes in pulsed oxygen helicon diffusion plasmas," <i>J. Appl. Phys.</i> 78, p. 766 (1995).                     |
| PL | C. Charles et al., "SiO <sub>2</sub> deposition from oxygen/silane pulsed helicon diffusion plasma," <i>Appl. Phys. Lett.</i> 67, p. 40 (1995).                          |
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| PL |  |
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| EXAMINER <i>P. Hasanzadeh</i> | DATE CONSIDERED <i>5-25-03</i> |
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**U.S. PATENT DOCUMENTS**

| EXAMINER'S INITIALS | PATENT NO. | DATE       | NAME           | CLASS | SUBCLASS | FILING DATE |
|---------------------|------------|------------|----------------|-------|----------|-------------|
| pt                  | 5,318,668  | 06/07/1994 | Tamaki et al.  | 156   | 662      | 10/20/1992  |
| pt                  | 5,318,664  | 06/07/1994 | Saia et al.    | 156   | 643      | 11/14/1991  |
| pk                  | 5,312,518  | 05/17/1994 | Kadomura       | 156   | 662      | 05/29/1992  |
| pk                  | 5,310,452  | 05/10/1994 | Doki et al.    | 156   | 643      | 07/20/1992  |
| pt                  | 5,289,010  | 02/22/1994 | Shohet         | 250   | 492.21   | 12/08/1992  |
| pt                  | 5,286,344  | 02/15/1994 | Blalock et al. | 156   | 657      | 06/15/1992  |
| pt                  | 5,286,297  | 02/15/1994 | Moslehi et al. | 118   | 723 E    | 06/24/1992  |
| pk                  | 5,284,549  | 02/08/1994 | Barnes et al.  | 156   | 662      | 01/02/1992  |
| pl                  | 5,259,924  | 11/09/1993 | Mathews et al. | 156   | 653      | 04/08/1992  |

**FOREIGN PATENT DOCUMENTS**

| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION              |                          |
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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|                                 |  |
|---------------------------------|--|
| pl                              | X. Chen et al., "Pulse plasma polymerization of tetramethyltin: Nanoscale compositional control of film chemistry," Chem. Mater. 8, p. 1067 (1996).                                  |
|                                 | K. Hashimoto et al., "Reduction of the charging damage from electron shading," 1996 1st International Symposium on Plasma Process-Induced Damage, Santa Clara, CA, May 13-14 (1996). |
| pl                              | M.A. Lieberman et al., "Global models of pulse-power-modulated high density, low pressure discharges," Plasma Sources Sci. Technol. 5, p. 145 (1996).                                |
|                                 |  |
| EXAMINER <i>pt Hassan Zadeh</i> | DATE CONSIDERED 5-25-03  |

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| <b>U.S. PATENT DOCUMENTS</b>  |   |            |               |       |          |   |
| EXAMINER'S INITIALS   | PATENT NO.  | DATE       | NAME          | CLASS | SUBCLASS | FILING DATE                                       |
| pl  | 5,242,538   | 09/07/1993 | Hamrah et al. | 156   | 643      | 01/29/1992  |
| pl  | 5,234,529   | 08/10/1993 | Johnson       | 156   | 345      | 10/10/1991  |
| pl  | 5,231,057   | 07/27/1993 | Doki et al.   | 437   | 225      | 08/20/1991  |
| pl  | 5,227,331   | 07/13/1993 | Westmoreland  | 437   | 174      | 02/10/1992  |
| pl  | 5,219,485   | 06/15/1993 | Wang et al.   | 252   | 79.3     | 10/17/1991  |
| pl  | 5,217,567   | 06/08/1993 | Cote et al.   | 156   | 643      | 02/27/1992  |
| pl  | 5,201,994   | 04/13/1993 | Nonaka et al. | 156   | 643      | 11/17/1989  |
| pl  | 5,188,704   | 02/23/1993 | Babie et al.  | 156   | 643      | 05/09/1991  |
| pl  | 5,160,408   | 11/03/1992 | Long          | 156   | 656      | 04/27/1990  |
| <b>FOREIGN PATENT DOCUMENTS</b>   |   |            |               |       |          |   |
| EXAMINER'S INITIALS   | PATENT NO.  | DATE       | COUNTRY       | CLASS | SUBCLASS | TRANSLATION                                       |
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| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b> |   |            |               |       |          |   |
| pl  | Y. Lin et al., "Negative and positive ions from CF <sub>4</sub> /O <sub>2</sub> RF discharges in etching Si," Appl. Phys. Lett. 62, p. 675 (1992).  |            |               |       |          |   |
| pl  | M. Moisan et al., "Radio frequency or microwave plasma reactors? Factors determining the optimum frequency of operation," J. Vac. Sci. Technol. B9, p. 9 (1991).  |            |               |       |          |   |
| pl  | H. Otake et al., "Charge-free etching process using positive and negative ions in pulse-time modulated electron cyclotron resonance plasma with low frequency bias," Appl. Phys. Lett. 68, P.2416 (1996). |            |               |       |          |   |
| EXAMINER <i>D. Hassan Zadeh</i>   | DATE CONSIDERED <i>5-25-03</i>  |            |               |       |          |   |

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|   | APPLICANT Stephen E. Savas   |            |                 |       |          |   |
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| EXAMINER'S INITIALS   | PATENT NO.   | DATE       | NAME            | CLASS | SUBCLASS | FILING DATE                                       |
| PL  | 5,153,442  | 10/06/1992 | Bovino et al.   | 250   | 551      | 01/03/1991  |
| PL  | 5,112,435  | 05/12/1992 | Wang et al.     | 156   | 643      | 11/29/1989  |
| PL  | 5,108,542  | 04/28/1992 | Lin             | 156   | 643      | 08/23/1990  |
| PL  | 5,007,982  | 04/16/1991 | Tsou            | 156   | 643      | 07/11/1988  |
| PL  | 4,994,715  | 02/19/1991 | Asmus et al.    | 315   | 111.71   | 07/21/1988  |
| PL  | 4,933,300  | 06/12/1990 | Koinuma et al.  | 437   | 110      | 02/12/1988  |
| PL  | 4,985,112  | 01/15/1991 | Egitto et al.   | 156   | 643      | 02/09/1987  |
| PL  | 4,970,435  | 11/13/1990 | Tanaka et al.   | 315   | 111.21   | 12/08/1988  |
| PL  | 4,935,661  | 06/19/1990 | Heinecke et al. | 313   | 231.31   | 06/26/1986  |
| <b>FOREIGN PATENT DOCUMENTS</b>   |  |            |                 |       |          |   |
| EXAMINER'S INITIALS   | PATENT NO.   | DATE       | COUNTRY         | CLASS | SUBCLASS | TRANSLATION                                       |
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| <b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b> |  |            |                 |       |          |   |
| PL  | L.J. Overzet et al., "Enhancement of the negative ion flux to surfaces from radio-frequency processing discharges," J. Appl. Phys. 66, p. 1622 (1989). |            |                 |       |          |   |
|   |  |            |                 |       |          |   |
| PL  | L.J. Overzet, "Model for charge movement after the radio frequency excitation is extinguished," J. Vac. Sci. Technol. A11, p. 1114 (1993).             |            |                 |       |          |   |
|   |  |            |                 |       |          |   |
| PL  | L.J. Overzet et al., "Modeling and measurements of the negative ion flux from amplitude modulated rf discharges," J. Appl. Phys. 72, p. 5579 (1992).   |            |                 |       |          |   |
|   |  |            |                 |       |          |   |
| EXAMINER <i>P. Hassan Zadeh</i>   | DATE CONSIDERED 5-25-03  |            |                 |       |          |   |

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## U.S. PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT NO. | DATE       | NAME               | CLASS | SUBCLASS | FILING DATE |
|---------------------|------------|------------|--------------------|-------|----------|-------------|
| ph                  | 4,918,031  | 04/17/1990 | Flamm et al.       | 437   | 225      | 12/28/1988  |
| ph                  | 4,897,365  | 01/30/1990 | Baldi et al.       | 437   | 69       | 11/23/1987  |
| pl                  | 4,891,118  | 01/02/1990 | Ooiwa et al.       | 204   | 298      | 11/23/1988  |
| ph                  | 4,863,549  | 09/05/1989 | Grinwald           | 156   | 345      | 07/01/1988  |
| pt                  | 4,857,140  | 08/15/1989 | Loewenstein        | 156   | 643      | 03/31/1988  |
| ph                  | 4,836,887  | 06/06/1989 | Daubenspeck et al. | 156   | 643      | 11/23/1987  |
| pl                  | 4,836,886  | 06/06/1989 | Daubenspeck        | 156   | 643      | 11/23/1987  |
| ph                  | 4,824,690  | 04/25/1989 | Heinecke et al.    | 427   | 38       | 11/03/1987  |
| pl                  | 4,807,016  | 02/21/1989 | Douglas            | 357   | 67       | 11/20/1987  |

## FOREIGN PATENT DOCUMENTS

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |  |
|----|--|
| ph | L.J. Overzet et al., "Negative and positive ions from radio frequency plasmas in boron trichloride,"<br>Appl. Phys. Lett. 59, p. 161 (1991).   |
| pl | L.J. Overzet et al., "Time-resolved power and impedance measurements of pulsed radio frequency discharges," Plasma Sources Sci. Technol. 4, p. 432 (1995).   |
| pl | S. Samukawa, "Pulse-time-modulated electron cyclotron resonance plasma etching for highly selective, highly anisotropic, and notch-free polycrystalline silicon patterning," Appl. Phys. Lett. 64, p. 3398 (1994). |

EXAMINER *P. Hassan Zadeh* DATE CONSIDERED *5-25-03*

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**U.S. PATENT DOCUMENTS**

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|---------------------|------------|------------|-----------------|-------|----------|-------------|
| pk                  | 4,793,897  | 12/27/1988 | Dunfield et al. | 156   | 643      | 03/20/1987  |
| pk                  | 4,749,589  | 06/07/1988 | Heinecke et al. | 427   | 39       | 12/10/1985  |
| pk                  | 4,734,157  | 03/29/1988 | Carbaugh et al. | 156   | 643      | 03/18/1987  |
| pk                  | 4,717,447  | 01/05/1988 | Dieleman et al. | 156   | 643      | 10/31/1983  |
| pk                  | 4,693,805  | 09/15/1987 | Quazi           | 204   | 192,22   | 02/14/1986  |
| pk                  | 4,654,114  | 03/31/1987 | Kadomura        | 156   | 643      | 12/16/1985  |
| pk                  | 4,585,516  | 04/29/1986 | Corn et al.     | 156   | 643      | 03/04/1985  |
| pk                  | 4,568,563  | 02/04/1986 | Jackson et al.  | 427   | 40       | 06/21/1985  |
| pk                  | 4,263,088  | 04/21/1981 | Gorin           | 156   | 626      | 06/25/1979  |

**FOREIGN PATENT DOCUMENTS**

| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION              |                          |
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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|    |  |
|----|--|
| pk | S. Samukawa, "Pulse time-modulated electron cyclotron resonance plasma etching with low radio-frequency substrate bias," Appl. Phys. Lett. 68, p. 316 (1996).  |
|    | S. Samukawa et al., "Time-modulated electron cyclotron resonance plasma discharge for controlling generation of reactive species," Appl. Phys. Lett. 63, p. 2044 (1993).   |
| pk | S. Samukawa et al., "Pulse-time modulated electron cyclotron resonance plasma etching for highly selective, highly anisotropic, and notch-free polycrystalline silicon patterning," J. Vac. Sci. Technol. B12, p. 3300 (1994). |
|    |  |
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|---------------------|------------|------------|--------------------|--------|----------|-------------|
| pk                  | 4,180,432  | 12/25/1979 | Clark              | 156    | 643      | 12/19/1977  |
| pk                  | 4,075,583  | 02/21/1978 | Kershaw            | 333    | 73 R     | 05/24/1976  |
| pk                  | 3,940,506  | 02/24/1976 | Heinecke           | 427    | 38       | 05/03/1974  |
| pk                  | 4,568,410  | 02/04/1986 | Thornquist         | 156    | 643      | 12/20/1984  |
| pk                  | 4,412,119  | 10/25/1983 | Komatsu et al.     | 219    | 121 PF   | 05/05/1981  |
| ph                  | 4,401,507  | 08/30/1983 | Engle              | 156    | 643      | 07/14/1982  |
| pk                  | 4,283,249  | 08/11/1981 | Ephrath            | 156    | 643      | 08/17/1979  |
| pk                  | 5,983,828  | 11/1999    | Savas              | 118    | 7231     |             |
| pk                  | 4,500,563  | 02/19/1985 | Ellenberger et al. | 427/38 | 427/39   |             |

## FOREIGN PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION              |                          |
|---------------------|------------|------|---------|-------|----------|--------------------------|--------------------------|
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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |  |
|----|--|
| pk | T. Shibayama et al., "Silicon etching by alternating irradiations of negative and positive ions," Plasma Sources Sci. Technol. 5, p. 254 (1996). |
|    | B.A. Smith et al., "Time-resolved energy distribution of F' from pulsed radio frequency discharges," J. Appl. Phys. Lett. 78, p. 5195 (1995).    |
| pk | H. Sugai et al., "Diagnostics and control of radicals in an inductively coupled etching reactor," J. Vac. Sci. Technol. A13, p. 887 (1995).      |
|    |  |
| pk |  |
|    |  |

EXAMINER P. Hassanzadeh DATE CONSIDERED 5-25-03

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SHEET 9 OF 9

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| <b>INFORMATION DISCLOSURE<br/>CITATION</b><br><br><b>PTO-1449</b> | ATTY. DOCKET NO.<br>14912.786 | SERIAL NO.<br>10/053,138 |
|   | APPLICANT Stephen E. Savas    |                          |
|   | FILING DATE 01/18/2002        | GROUP 1763               |

**U.S. PATENT DOCUMENTS**

| EXAMINER'S INITIALS | PATENT NO. | DATE       | NAME           | CLASS   | SUBCLASS   | FILING DATE |
|---------------------|------------|------------|----------------|---------|------------|-------------|
| pk                  | 5,556,501  | 09/17/1996 | Collins et al. | 156/345 | 204/298.34 |             |
| pk                  | 5,514,603  | 05/07/1996 | Sato           | 437     | 16         | 05/06/1994  |
| pk                  | 5,928,528  | 07/27/1999 | Kubota et al.  | 216     | 67         | 09/02/1997  |
| pk                  | 6,231,777  | 05/15/2001 | Kofuji et al.  | 216     | 71         | 10/26/1995  |
| pk                  | 6,395,641  | 05/28/2002 | Savas          | 438     | 714        | 05/16/2001  |
| pk                  | 6,253,704  | 07/03/2001 | Savas          | 188     | 723 I      | 09/17/1999  |
|                     |            |            |                |         |            |             |
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**FOREIGN PATENT DOCUMENTS**

| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION              |                          |
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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|    |   |
|----|---|
| pk | J.T. Verdeyen et al., "Modulated discharges: effect on plasma parameters and deposition," J. Vac. |
|    | Sci. Technol. A8, p. 1851 (1990).   |
|    |   |
|    |   |
|    |   |

EXAMINER *P. Hassan zadeh* DATE CONSIDERED *5-25-03*

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